



ECE 189A/B/C CAPSTONE PROJECT PRESENTATIONS

2019 ENGINEERING DESIGN EXPO

JUNE 7, 2019 (Fri)

Projects @ ESB Rm 1001 (9a-12p) Posters @ Campbell Hall (1:30-3p)

ECE 189 A/B/C - Instructor: Dr. Yogananda Isukapalli
TAs: Brandon Pon and Carrie Segal

9:05 – Hands-On Flight (Arveng Technologies): a glove embedded with an array of sensors that provides intuitive real-time control over a drone.

Team: Oscar Wang, Alex Berlanga, Eduardo Olmos, Juan Reyes, Miguel Berlanga

9:30 – IEA Linguistics (IEA Lab): an interactive voice assistant that incorporates natural language processing and automation to assist integrated circuit product engineers.

Team: Ryan Kirkpatrick, Dali Xiao, Dang Nguyen, Min Jian Yang

9:55 – Cloud Control (AeroVironment): a wireless communication system which remotely transmits voice data to a drone which then broadcasts it to any targets below.

Team: Andrew Thompson, Anna Lee, Brent Morada, Reed Taylor

10:20 – Watchdog (NASA): aids astronauts in correctly adhering to mission procedures by utilizing computer vision and sensor embedded tools to provide guidance when necessary.

Team: Ryan Lorica, Anzhe Ye, Jiacheng Liu, Jingzhe Chen, Liqiang Mei

10:45 – Drone Scout (LGS Innovations): a self-contained, FPGA accelerated millimeter wave radar system capable of collecting detailed information of drones, such as size and speed, in a targeted area.

Team: Austin Hwang, Anthony Chen, Maga Kim, Sung In Kim

11:10 – BLiPS (Arthrex): a real time indoor positioning system that tracks the movement of doctors and nurses in an operating room environment. **Team:** Matthew Speck, Ahmed Saied, Amber Du, Kevin La

11:35 – Eternal Flight (Toyon Research Corp.): an in-flight battery exchange system that extends drones flight time by eliminating the need to land and recharge.

Team: Aditya Wadaskar, Kyle Douglas, Richard Boone, Sang Min Oh, Sayali Kakade

Thanks to our lead sponsor Qualcomm, and our project sponsors, LGS, AeroVironment, Arthrex, Toyon, Laritech, Arveng Technologies, IEA lab and NASA